How I fired my cable company and still enjoy TV, Internet and a home Phone

Stew Bottorf, Dunedin, FL









I wanted to save money by cutting cable. I don't watch much TV and for many years I paid my cable bill using all their bundling services for TV, Internet access and a wired home phone.

My TV watching wife became an expert using the cable remote. When all else failed, she even learned how to reboot the cable box. To cut cable, I must allow her to feel comfortable accessing the TV.

My last cable bill was \$153/mo.

Cutting quickly became my new passion!

- how much would I really save?
- was "cable cutting" worth an aggravating re-learning experience in my home

How I fired my cable company

and still enjoy TV, Internet and a home Phone

- Television Programming
- 2 Internet, Networking & Google Phone
- 3 A Club Opportunity?



How I fired my cable company

and still enjoy TV, Internet and a home Phone

Television Programming





U.S. cord cutters to reach 33 million this year, faster than expected Comment Sarah Perez @sarahintampa / Jul 25, 201



INVESTIGATIONS

CROSSWORDS

VIDEO

MORE V



NEWSLETTER



We get letters — yes, you can save money cutting the cord!

September 7, 2018

Jefferson Graham, USA TODAY Published 6:15 a.m. ET Sept. 6, 2018 | Updated 9:51 a.m. ET Sept. 7, 2018











We get letters!

Recently, we noted that people who ditch cable and cut the cable cord are getting a better TV experience, but they're not necessarily saving money.

Some of you disagreed with our theory, which is that the entertainment companies control the experience, they're jacking up the price of streaming services and the cost of internet to make it all come out as a wash in the end.

Some of you thought it was unfair to include the internet as part of the monthly entertainment bill because we'd be paying it anyway.





Amazon's Jeff Bezos donates \$10 million to PAC; Sanders introduces the BEZOS Act



We get letters - yes, you can save money cutting the cord!

THE WALL STREET JOURNAL.

U.S. Edition ▼ September 14, 2018 Today's Paper Video

Home World U.S. Politics Economy Business Tech Markets Opinion Life & Arts Real Estate WSJ. Magazine

Search Q

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September 14, 2018



BUSINESS

Cord-Cutters Beware: Streaming TV Prices Are Marching Higher

Sling TV and DirecTV Now raised rates over the summer; DirecTV plans another increase this year

By Drew FitzGerald

Sept. 14, 2018 12:50 p.m. ET

The online-only television bundles that have lured away cable-TV customers with rockbottom prices might not stay that low for long.

AT&T Inc.'s DirecTV Now streaming service recently raised its basic channel plan by \$5 over the summer, bringing its starting monthly cost to \$40. Chief Executive Randall Stephenson this week said the company is considering additional price increases for the service.

Most Popular Videos

Hurricane Florence Makes Landfall Amid Storm Surge Flood Warnings



A Bull Among
Bears: U.S. Soars,
Emerging Markets
Struggle



MEDIA

To look at it another way, Google suddenly finds itself as one of the country's most important distributors of cable TV content—and barring any reversal of the trend, YouTube TV's position likely will only strengthen over time. That might give them room to improve profitability, especially as Google upgrades the advertising experience on YouTube TV, which sometimes features blank unsold ad units. (Disclosure: I cut my Comcast video service last year and signed up for YouTube TV, which has proven to be a reasonable, but not perfect, substitute.)





September 2018 (afternoon) & repeated November 2018 (evening)

Cutting the Cord

"Cut the Cord, Things to Consider Before Firing Your Cable Company"

Hewie Poplock, Central Florida Computer Society Windows SIG leader; APCUG Representative

There are many reasons to cut the cord. Most do so to save money. Others do it to have better choices and just to be able to fire their cable company.

Hewie talked about many over the air and over the Internet services, including Broadband and Internet home phones.

"TV as we know it will disappear in the next few years."



November 3, 2018



Items I initially considered:

- TV
- Antenna
- Streaming packages (free and paid)
- New hardware
- VPN (Virtual Private Network)
- IPTV (Pro and Con)
- Internet
 - VOIP (Google) home phone



Antenna

Smallest cost with the greatest saving

Almost everyone in Pinellas County is within Tampa antenna coverage

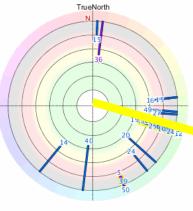
Transmission is from Riverview (~ 45 miles away across the bay)

Average more than 30 channels





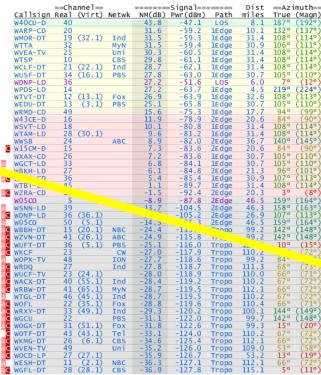
TBTC Map All Channels



Search Criteria

Address: exact Clearwater, FL Postal code 33765 Height: 5.0 ft.

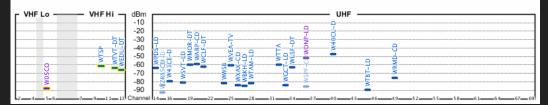
> db datecode 201801291705



Co-channel warning

= Adjacent channel warning

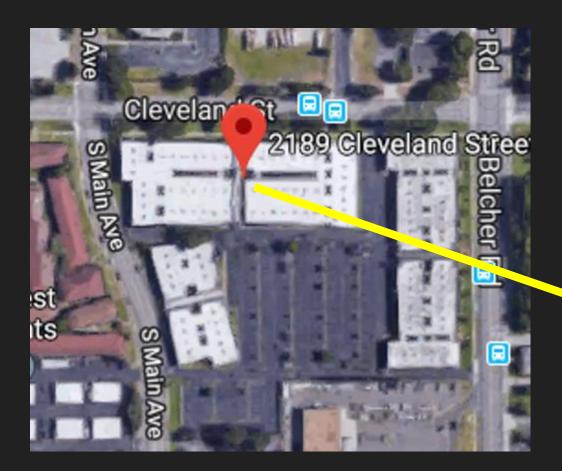
www.tvfool.com





105-109 degrees (ESE)





105-109 degrees (ESE)



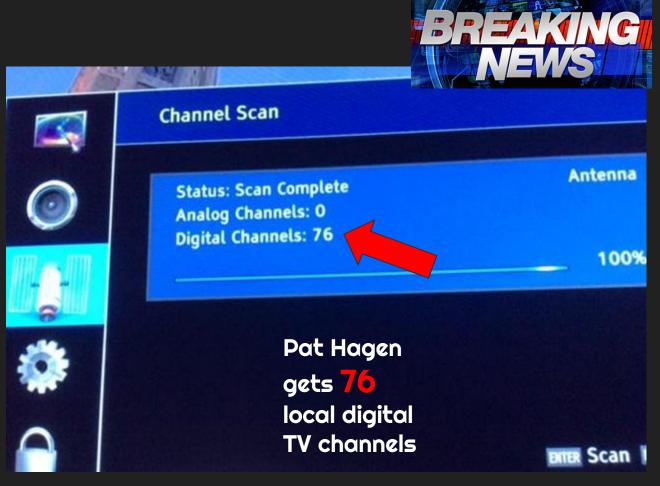


Antenna

- Antenna costs \$10 \$200
- Buy an antenna with an Amplifier
- Buy where you can return
- Antenna is the smallest cost that delivers the greatest savings















X

3.1

3.2

3.3

3.4

3.5

3.6

8.2

8.3

10.1

X

4 5:30 PM

Bidder 70

Bidder 70

Celtic Thunder X

America ReFramed

America ReFramed

Ready Jet Go!

PGA Tour Golf

TPC Boston in Norton, Mass.

Harry's House Guest

CBS Sports Spectacular

HD, Sports, 9/02/2018, TV-G)

The Jeffersons

Romeo Is Bleeding

^

CrossFit Games

4 5:30 PM

HD, Repeat, Music, TV-G)

(HD, Repeat, True, 8/28/2018, S6/E13, TV-PG)

HD, Repeat, True, 8/28/2018, S6/E13, TV-PG) Rough Cut with Fine Woodworking

(Repeat, Home, 5/26/2018, S8/E8, TV-G)

Eve in the Sky: Total Eclipse Block Party

HD Food 8/10/2018 S1/F12 TV-G)

(Comedy, 12/13/1978, S5/E11, TV-G)

Orama, Movie, 1994, TV-14, R. ***)

Dell Technologies Championship: Third Round from

Steven Raichlen's Project Fire

HD. Repeat. Children, 6/06/2018, S2/E6, TV-

◆ TIP No. 4

4 09/02

WILLIAM

W)RLD

FLORIDA

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ocreate

Smb.

Metv

ESCAPE

100

4 09/02 Þ

katie.jpg





Search for Programming

8 PM

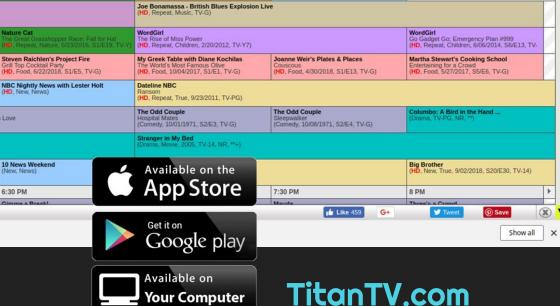
Masterpiece



0 View All

Florida Channel Programming





MORE

7:30 PM

Capitol Update

(HD. News)



6 PM

By default, the Schedule page displays three hours of programming. You may specify a different default between 1 and 6 hours with the Default Grid Duration option on the Site Preferences/My Preferences tab.

50 Years with Peter, Paul and Mary

(HD, Repeat, Music, TV-G)

The This Old House Hour

lature Cat

(New, News)

The Love Boat

Ask This Old House

NewsChannel 8 at 6:00

CBS Weekend News

(HD, New, News)

6 PM

Rain Chain, Vanity Installation

(HD, Home, 2/03/2018, TV-G)

(Comedy, 2/25/1978, S1/E22, TV-G)

The Nubile Nurse: Parents Know Best: A Selfless Love

(HD, Repeat, Home, 1/25/2018, TV-G)

▼ 5 PM

- (0)

6:30 PM

Changing Seas

Changing Seas

Nature Cat

(HD, New, News)

10 News Weekend

(New, News)

6:30 PM

Broadcast Stations

7 PM

Jimmie Vaughan and Gary Clark Jr.

Florida Crossroads

(HD, Repeat, Music, 11/13/2017, TV-PG)











Also made by: -- TiVo -- Tablo -- Amazon -- Air TV

Present cost of cable

\$153 / mo.

Savings \$153 / mo. or \$1836 / year

One-time Antenna cost = \$10 - \$200

ANTENNA MATH



Everything else requires an Internet connection

You may need wireless?
Fair Internet cost = \$40 - \$50 per month ??



Where do you buy your Internet?

Both of our local cable companies penalize present customers

Solutions:

- 1. Pay more forever
- 2. Disconnect for 30 days, return as a new user
- 3. Switch your Internet service provider
- 4. Use a different Internet technology (more later)



Present cost of cable

\$153 /mo.

Internet-only service

\$50 /mo.

Savings

\$103 /mo.

or \$1236 / year

INTERNET + ANTENNA MATH



Streaming: How does your household watch TV

- Traditional Way LIVE
 - Watch in real time as it is broadcast
 - Streaming cable clones: Sling, YouTube TV, Direct TV
 Playstation Vue



- Millennial Way ON DEMAND
 - Watch on my schedule when I choose to watch
 - Binge watch
 - Fast forward or skipping commercials
 - Streaming on-demand = Netflix, Prime, Vudu, Hulu



Free Streamers

PLUTO

Movies
News
Sports € more
SLO-TV
NewsMax

ABC News
CBS News
NBC News / CNBC
YouTube / TED

EarthCamTV

Special interest, religious and shopping networks
(Remember, this requires a wireless Internet connection)











Paid Streamers

Cable dupes \$ 25 - \$50+ / mo.
 Sling / YouTube TV / DirectTV / PlayStation Vue

On Demand Media \$ 10+ / mo. \$ UP
 Netflix, Prime, Vudu, Hulu, HBO, Showtime, etc.







Present cost of cable \$153 /mo.

Internet \$50 / mo. YouTube TV \$50 / mo.

Savings \$53/ mo.
or \$636 / year

One-time hardware cost: \$30 - \$200

ANTENNA +
INTERNET +
YOUTUBE TV
MATH



Present cost of cable

\$153 /mo.

Internet

\$50 /mo.

YouTube TV

\$50 /mo.

Amazon Prime

\$12 /mo.

Savings

\$41 /mo.

or \$492 / year

One-time hardware cost \$30 - \$200

ANTENNA +2 SERVICES MATH

Additional services may exceed the present cable cost!



Depending on your TV, streams may require wireless Internet plus an add-on device

- Roku
- Amazon Firestick
- Apple TV







IPTV Hardware

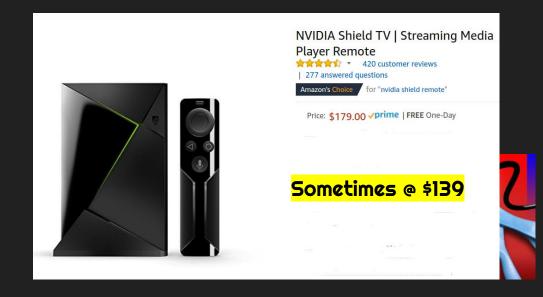
Android TV Choices

\$40, \$50 and \$179

Amazon Firestick
Amazon Firestick 4K
Amazon Android

Nvidia Shield Android TV







2018 Model GooBang Doo ABOX A1 max Android 7.1 TV Box, 2GB RAM...

by GooBang Doo

Sold by GooBang Doo US and Fulfilled by Amazon.

Learn more

Add to Wish List



Beelink GT1 Ultimate Android 7.1 TV Box 64 Bits DDR4 3GB eMMC...

by Beelink

Price: \$89.99 /prime

Sold by Beelink and Fulfilled by Amazon.

Learn more

Add to Wish List

Avoid these... check their ratings

Free Streamers

Free movies, archived TV Shows and some live TV.

May also be viewed on phone or computer.

* To be safe, use a VPN! *





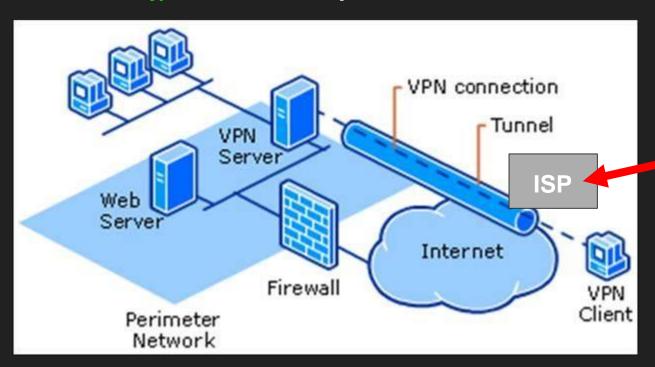
(Both sideload as Android apps)

I call this a "Less-White" Area



Virtual Private Network

Sets an <u>encrypted-tunnel</u> from your home to an Internet source





Internet Service Provider cannot see inside your tunnel



Virtual Private Network

Sets an encrypted tunnel from device to Internet servers

- This improves your security for all transactions
- Cable companies cannot see your Internet activity
- To be safe, assume the Feds can see and identify everything you do online.



Private Internet Access

Works w/ Android, Linux, Windows, Chromebooks, Mac & routers Cost \$40 / yr. for 5 concurrent

Plenty of other VPN vendors
(some offer a lifetime fee / others free)



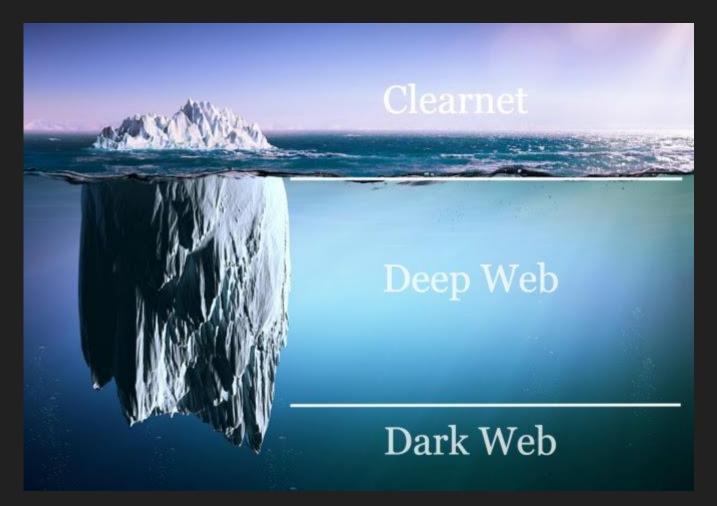


Internet Protocol Television

"Think of IPTV as cable television on steroids delivered through the Internet, but for a fraction of the price."

- Better savings than streaming services (IPTV pricing \$5 \$25 /mo.)
- Probably need to buy hardware for IPTV (\$50 \$200 one time)
- Requires a VPN service (\$40 /yr.)
- · Plus a small measure of technical skill





Surface,
Deep &
Dark Webs

IPTV hides below the surface

I doubt IPTV is located in USA











IPTV Channels

















- HD Quality or better
- Reliability?







IPTV Provider Plans

To select an IPTV plan, list your media needs and interface expectations

My needs:

- I need a provider that offers Turner Classic Movies,
 Oxygen and Fox News (almost all offer these channels)
- I want an interface my wife can manage on her own,
 something like our cable box remote (hardware dependent)









2 Great YouTube Presenters

BEWARE: Google, Amazon and Facebook all limit online IPTV information. Links are difficult if not impossible to find in Google searches. My best links often come from YouTube guides (in notes below the videos).



Troypoint







IPTV Providers

I've checked these services:

- Gears Reloaded (a new APK, I user costs \$18.75 a month)
- Area51 (has an APK, the 2 user license costs \$15 every months)
- The Players Klub (a new APK, 1 user costs \$5 a month)

Others:

- Eternal
- Limitless (\$14/month)
- Kodi Solutions (\$5/month)
- ... and many more



Monthly Fees

Present cost of cable \$153.00

Internet \$50.00

VPN \$3.34

Gears Reloaded,

Area51 & Players Klub \$28.75

Total \$82.09

Savings \$70.91 / mo.

or \$850.92 / year

One time Media Player Cost \$30 - \$200

IPTV MATH

INTERNET +
GEARS RELOADED
+ AREA 51
+ PLAYERS KLUB



I receive additional program content!

Android utilities I've sideloaded on my Firestick

- WiFi Utility
- Downloader
- Troupoint Rapid-Installer
- Aptoide TV
- Speed Test
- ES File Explorer
- Mouse Toggle
- Send Anywhere
- Set Orientation
- Device Info for Android
- Chrome or Silk Browser

ALL OF THESE ARE FREE!











Hardware I've bought for my Firestick





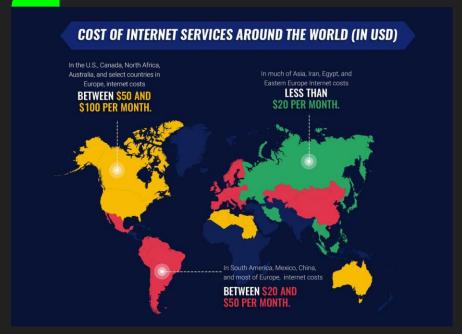


- Bluetooth Mini Keyboard and Mouse
- HDMI F/F Gender Changers
- USB OTG Cable

How I fired my cable company

and still enjoy TV, Internet and a home Phone

Cost of Internet Access





Internet Service Providers

Spectrum when I drop TV is ~ \$75/month (month-to-month)
WOW new customer cost is ~ \$55/month (2 year contract)
(FIOS is not available in my subdivision)

Debbie waited 30 days, new user, now pays \$45/mo but it gos up in 12 months

Pat as a new user pays ~ \$20/mo and believes it will <u>not</u> go up

Beverley pays \$500/yr for Sprint / Calyx 4G Hotspot service (or about \$42/mo)

Can I find a way to pay even-less than these?

"The Unlimited Discounted Non-Profit Reseller Plan"





Unlimited Discounted Non-Profit Reseller Plan





Plans:

User Cost:

You get / How to qualify:

Calyx Institute
New York

\$500 / year

Hot Spot / SIM / Tee Shirt Become a Calyx member



\$ 135 / year \$80 Hotspot Hot Spot / SIM
Non-profit or Income Eligibility

Mobile Beacon provides modems, the special Sprint plan and SIM card to those above. The plan uses the Sprint 4G service with a **Franklin R850** or a **CoolPad Surf** Hotspot

Unlimited Discounted Non-Profit Reseller Plans

- Carrier Networks Used: Sprint
- Carrier Relation: Reseller
- Plan Types Available: Data only
- Device Types Permitted: Hotspot
- **Device Purchase Required:** Non-profit dependent, but typically, yes.
- Mobile Hotspot Use: Yes all
- Throttling: None
- Network Management: 50GB
- International Roaming: No international coverage is included.
- Domestic Roaming: No domestic <u>roaming</u> or 3G Sprint coverage
- Plan Period: typically yearly
- Data Roll Over: No
- Overage Charges: No
- **Streaming:** There are no restrictions or blocks on video streaming.
- <u>Unlimited</u>: Yes







Non-Profit Business Income

Persons in Family	Max Allowed Income
1	\$24,980
2	\$33,820
3	\$42,660
4	\$51,500
5	\$60,340
6	\$69,180
7	\$78,020
8	\$86,860

Franklin R850 Hotspot



Cell service in, wireless Ethernet out

No wired Ethernet ports

< 10 concurrent connections Internet Portability

Rechangable Battery < 10 hours

AC adapter & cable

Manual

Simple setup using a laptop, browser and the Display Window

> Detailed setup for Windows, iPhone, Mac, Android and Chromebook

> > Guest account

Sprint support

Security Options: WPA2-PSK WPA-PSK/WPA2-PSK

4G Internet Access. 4 Nonprofits. 4 Less.

CoolPad Surf Hotspot

Cell service in, wireless Ethernet out

No wired Ethernet ports

< 10 concurrent connections

Rechangable Battery

< 5 hours

AC adapter & cable

Manual

Smart color LEDs replace the display window.

Detailed setup for Windows, iPhone, Mac, Android and Chromebook

Guest account

Sprint support

Security Options: WPA2-PSK
WPA-PSK/WPA2-PSK

4G Internet Access. 4 Nonprofits. 4 Less.





February 2019 My Firestick data use

Total 1079.63 GB (1 terabyte)
On Spectrum Cable

< 21 X Sprint Basic Plan</p>

Monthly Android Data Usage on FireTV	TV Room February 28 at 6:15 PM	Bedroom February 28 at 6:30 PM	February Totals
by Device	Use (MB)	Use (MB)	Use (MB)
KS Hosting	82100	313000	395100
Newsmax	48260		48260
Area51	12250	477000	489250
PIA	9480	64120	73600
Lenox	4690		4690
Gears Reloaded	1470	24310	25780
FireTV System	1140	38640	39780
Mobdro	890	50	940
Video	139	82	221
Fire TV Home	131		131
Alonzee	79	81	160
Troypoint	63		63
EarthCam	603		603
Appstore	53	48	101
Speedtest	103		103
Downloader	28	9	37
ES File Explorer	22	48	70
Aptitude TV	12	1.2	13.2
Live NetTV	8	21	29
Send Anywhere	4	9	13
Mouse Toggle	0.2	1.5	1.7
Cinema <u>HD</u>	0.1	3	3.1
MX Player	0.03		0.03
Pluto		683	683
Total MB	161525.33	918106.7	1079632.03
Total GB	161.53	918.11	1079.63

Hotspot notes:

Hotspot placement is critical for both networks

Near a window works best for me

The Hotspot just works 24x7
10-14.5 Mbps down. 1.5-3 Mbps up
quite a change from 100Mbps cable Internet
but very usable for my Internet needs

Repurposed my old router into a WiFi range extender benefit of gaining 4 wired Ethernet connections connected my "Google" phone, desktop computer

Bought a new Wavlink WiFi Extender for better signal into the bedrooms using both 2.4 \$ 5 GHz bands





Google Phone:

Used my Obihai 202 VOIP phone adapter to reconnect my Google home phone using a wired connection from the repurposed router (WiFi Extender).





Internet Access

Spectrum when I drop TV will cost ~ \$75/month (month to month) WOW as a new customer costs ~~ \$55/month (2 year contract)



I bought through PCs for People:

My cost was \$135 + \$80 the first year (\$215 or about \$18/mo.) then \$135 annually in later years (\$11.25 / mo.)

My Cut Cable Savings

Stew's "Cut Cable costs"



```
My 2020 savings ...... $1305.68 2019 savings ...... $1225.68
```

Ecuting cable 3 months ago and I'm still married!

Issues I've encountered switching to mobile Internet

Setup learning curve

Lucky I kept cable Internet for troubleshooting (LAN & Internet)

No Hotspot antenna data;

I'm limited to default-cell phone signal strength

It would be nice to have a greater cell signal or I could attach an external mobile antenna

I'm still looking for help with a 4G cell-antenna or amplifier.



Issues I've encountered switching to mobile Internet

The bane of streaming is BUFFERING

Realize some problems are upstream (out of my control)

Much slower Internet speeds

Only a problem if I try to download 2Gb Linux ISO files

Two-streamer issues

At times 2 different streams appears to clog the Hotspot, other times it's okay

Slower speeds on some evenings

Then other nights it's okay?? But it's LIVABLE



We have a nice group of Streamers who meet with me twice each month called the Cut Club. Together we combine our knowledge to pay less for cable / Internet and increase our ability to view video content directly from the Internet. Some of us are saving \$1000 or more a year and enjoy the adventure.



Come to the "Cut Club"

1st Thursday @ 10 am (Self Help)

3rd Thursday @ 10 am (Presentation)

We'll hold your hand and assist you in "Cutting your Cable!"



What happens with 5G?

Will I be affected by the Sprint-TMobile merger?

What about upcoming scary streaming legislation



Unknown

If my Hotspot becomes outdated, I'll still have saved \$\$ in 2019.

Other cell carriers are now offering expanded data plans at more money (but none offer unlimited data).

Unknown, follow @ U.S. Lawmakers Push To Criminalize Streaming

How I fired my cable company

and still enjoy TV, Internet and a home Phone

Opportunity for APCUG or local clubs ?





Opportunity for APCUG or local clubs?

As nonprofits, your club can buy Hot Spots and Internet through:



Cost \$215 the first year and then \$135 in later years

Like Calyx, give-away Internet access to your more-generous members

@ \$500 / year (realizing \$285 / \$365 profit each) = 5 to 7 members

10 members (\$2850 / \$3650 profit) = 50 to 70 members

100 members (\$28,500 / \$36,500 profit) = 500 to 700 members

or you might charge less

Opportunity for APCUG or local clubs?



Check the Sprint coverage maps to be sure your area is covered

Advertise and grow your club -- you'll easily beat all other local ISP plans

Your club's support staff can support users at any location. Hotspots work with Windows, Apple, Linux, Chromebook, Android, even gamers.

You might assist other non-profits getting this affordable technology locally.

Additional information is in my Links

How I fired my cable company and still enjoy TV, Internet and a home phone

Antenna € Free White Streamers	Dark Streamers
TV Fool - Antenna information	Gears Reloaded
Titan TV - TV Guide Online	Area 51
Pluto TV - Best Free Streamer	The Players Klub
EarthCamTV - Another Free Streamer	
Newsmax - News Free Streamer	Android Hardware
	Bluetooth iPazzPort
Handware	F/F Female Gender changer
Nvidia Shield	
<u>Firestick</u>	Mobile Internet Service
Roku	Unlimited Discounted Non-Profit Plan
<u>AppleTV</u>	PCs for People
	Mobile Beacon
"Less White" Free Streamers	Colyx Institute
Mobdro - Live TV	Franklin R850 CoolPad Surf
Cinema Free - Movies & Archived Video	Router to WiFi Extender
	Mobile 5G Sprint TMobile merger
VPN	
Private Internet Access	Presentation € Me
	Tampa Bay Technology Center
Technical Help	Stew's FOSSSIG site
Troupoint -	Link to this presentation
Electrical MD -	My illegality rationalization

8/17/2019 Stew Bottorf

Hyperlinks Resource Page



Questions?

"How I fired my cable company and still enjoy TV, Internet and a home phone"

This Presentation
Full Page PDFs
Hyperlinks Resource Page

Tampa Bay Technology Center Clearwater, FL





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